

Amendments to the Specification

In the Amendment filed on February 5, 2007, a paragraph that was to be amended (paragraph [0092]) was inadvertently misidentified as paragraph [0093]. Paragraph 0093 was the paragraph to be replaced.

Please make the following additional amendments to the specification:

Please replace paragraph [0091] with the following amended paragraph:

[0091] The alternative embodiment illustrated by FIG. 7 is similar to that shown in FIG. 1. But, the FIG. 7 embodiment is different because the output ends of separation capillaries 28, 30 and 32 are connected to each other at the interface with a single outlet capillary 66 which cooperates with on-column detector 86 that senses ultraviolet (UV) or fluorescent energy. The exit position of outlet capillary 66 may also be connected (as shown) to off-column detector 88 which comprises an electrochemical, radioactive, mass spectrometry, circular dichroism detector or nuclear magnetic resonance detector.

Please replace paragraph [0123] with the following amended paragraph:

[0123] FIG. 14 illustrates that the transport channel 24A and separation channels 28A, 30A and 32A, for the electrophoresis apparatus 10 may be formed with uniform and concave shapes that are engraved, etched or otherwise formed into a glass or plastic microchip using known lithography or other manufacturing techniques. Analyte concentrators 34A, 36A and 38A are disposed at the respective intersections of transport channel 24A and separation channels 28A, 30A and 32A with the valving system 100 to control the flow of fluid and microenvironment to each of the concentrators ~~[[37A,]]~~ 34, 36, and 38 as previously described. Near the detector ~~[[66]]~~ 86, valves may be provided to control of the fluid to the output capillary 66 from the plurality of separation capillaries. FIG. 15 illustrates that each concentrator, e.g., 37A formed by the intersection of the transport and separation channels may be surrounded by valves to control the flow of liquid through the transport channel 24A and the corresponding separation channel.

Please replace paragraph [0124] with the following amended paragraph:

[0124] FIG. 16 illustrates a perspective view of an electrophoresis

apparatus 10 having a transport channel 24A and a plurality of separation channels 28A, 30A, 32A, and etc. Near the outlet side of the separation channels, a detector 86 may be provided that aligns with one of the detection windows of the separation channels to detect the analyte passing through the respective separation channels sequentially. To simultaneously detect the analytes passing through all of the separation channels, a detector may be provided for each separation channel to speed up the process. Reference numeral ~~[[17a]]~~ 17A shows an analyte concentrator ~~positioned differently than~~ similar to the analyte concentrator 17 in FIG. 1, for example.

Please replace paragraph [0141] with the following amended paragraph:

[0141] FIG. 23B ~~illustrates~~ generally at 170 ~~illustrates~~ polymeric microstructures with ~~immobilized Y-shape-antibody~~ antibodies having affinity for a particular analyte within the concentrator area without the need for frits. Each beaded polymeric microstructure may have an antibody that has affinity for a different analyte.